



UNITED STATES PATENT AND TRADEMARK OFFICE

HD

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,493	02/06/2004	Frank Litjens	120465-3	6639
25743 7590 06/15/2007 GENERAL ELECTRIC COMPANY GE PLASTICS ONE PLASTICS AVENUE PITTSFIELD, MA 01201			EXAMINER MCCREARY, LEONARD	
			ART UNIT	PAPER NUMBER
			3616	
			MAIL DATE	DELIVERY MODE
			06/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/773,493

Applicant(s)

LITJENS, ET AL.

Examiner

Leonard J. McCreary, Jr.

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-18,20-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-18,20-31 and 33-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/6/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 June 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 9-10, 12-14, 22-25, 29-30, and 38-39 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 588,176 to Hongo et al. in view of GB 2,263,667 to Karlsson et al. Hongo discloses a pad for use in an air bag device comprising the following:

a. An instrument panel (page 2, line 4) comprising: a thermoplastic base substrate 13 (page 2, lines 5-6) having a first surface and a second surface; at least one tear seam notch 19 formed into said first surface of said base

substrate; at least one consolidated area 19, 118 formed into said second surface of said base substrate, said at least one consolidated area aligned with said at least one tear seam notch; at least one hinge area H comprising an area of low consolidation wherein a thickness of said base substrate at said low consolidation area is greater than a thickness of said base substrate at said at least one consolidation area, said at least one tear seam notch and said at least one hinge area defining at least one airbag door (Fig. 3) (claim 1.)

b. A width of said at least one consolidated area is equal to or greater than a width of said at least one tear seam notch (Fig. 2) (claims 1, 10, 22.)

c. Each consolidation area comprises a transition portion located around the periphery of each consolidation area (Fig. 2) (claims 3, 12.)

d. Said transition portion comprises a radius of curvature (Fig. 2) (claims 4, 13.)

e. A base substrate 4 is compression molded into a predetermined shape of said instrument panel (Figs. 1-3) (claims 5, 14.)

f. A thickness of said base substrate at said hinge low consolidation area is greater than a thickness of said base substrate at an area adjacent said hinge area (Fig. 1) (claim 9.)

g. An instrument panel and an airbag 15, said air bag positioned adjacent said instrument panel (Fig. 1), said instrument panel comprising: a thermoplastic base substrate having a first surface and a second surface, said air bag positioned adjacent said second surface of said base substrate; at least one tear seam notch formed into said first surface of said base substrate; at least one

consolidated area formed into said second surface of said base substrate, said at least one consolidated area aligned with said at least one tear seam notch; at least one hinge area comprising an area of low consolidation wherein a thickness of said base substrate at said low consolidation area is greater than a thickness of said base substrate at said at least one consolidation area, said at least one tear seam notch and said at least one hinge area defining at least one airbag door, said tear seam notch configured to open when said airbag deploys permitting said airbag to deploy through said instrument panel (claim 10.)

4. Hongo teaches neither fiber reinforcements nor compression molding. Karlsson discloses a method of manufacturing covers for vehicle airbags and makes known:

a. The thermoplastic base substrate consists essentially of fiber reinforcements and polyethylene or polypropylene or combinations thereof (abstract) (claims 1, 10, 22).

b. Compression molding (page 2, lines 20-26).

5. Re claims 1, 10, 22, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the air bag pad of Hongo to include fiber-reinforced polypropylene as taught by Karlsson so as to impart desirable material properties over a broad temperature range, and to simplify the moulding process (page 1, lines 24-27 and page 2, lines 30-26).

6. Re claims 22-25 and 29-30, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the air bag pad of Hongo to include the compression molding method of manufacture as taught by Karlsson so as to incorporate

Art Unit: 3616

reinforcing fibers into the thermoplastic to impart greater strength to the cover (page 2, lines 20-26.)

7. Re claims 1, 5, 10, and 14, the method of forming the apparatus is not germane to the issue of patentability of the apparatus itself. Therefore, the limitations of “pressed” and “compression molded” have not been given patentable weight since those limitations do not impart a structural difference from an apparatus that is molded using comparable known processes widely used in the automotive industry, such as injection molding and vacuum molding.

8. Claims 6-8, 15-18, 20-21, 26-28, 31, 33-37, and 40-41 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 588,176 to Hongo et al. in view of GB 2,263,667 to Karlsson et al. as applied to claims 1 and 10 above, and further in view of U.S. 5,728,342 to Wirt et al. The disclosures of Hongo, Karlsson, and Wirt are discussed above. Hongo does not teach compression molding the cover, nor the use of an intermediate or an outer layer as claimed, nor a hidden tear seam.

9. Karlsson discloses a method of manufacturing an airbag cover and teaches:

c. a base substrate 4 is compression molded into a predetermined shape of said instrument panel (Figs. 1-3) so as to incorporate reinforcing fibers into the thermoplastic, which may be polypropylene, to impart greater strength to the cover (page 2, lines 20-26) (claims 17, 22, 31).

10. Wirt discloses a cover for an airbag and teaches the following in order to improve the aesthetic appearance and feel of an instrument panel (column 1, lines 9-14):

h. An intermediate layer 46 adjacent said first surface of said base substrate 38, said intermediate layer comprising a resilient material (column 4, line 29) (claims 6, 15, 26.)

i. The resilient material comprises a foam material (column 4, line 29) (claim 7.)

j. An outer layer 48 adjacent said intermediate layer (claim 8.)

k. An outer layer 48 adjacent said intermediate layer, said at least one tear seam notch 28 is not visible through said outer layer before deployment of said airbag (Fig. 6) (claim 16.)

11. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the airbag pad of Hongo by constructing the cover of multiple layers including a resilient foam intermediate layer and an outer finish layer to hide tear seams as taught by Wirt so as to improve the overall aesthetics of the cover (column 1, lines 9-14.)

Response to Arguments

12. Applicant's arguments with respect to claims 1, 10, 17, 22, and 31 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues Hongo does not teach a thermoplastic base substrate consisting essentially of fiber reinforcements and polyethylene or polypropylene or combinations thereof. Karlsson teaches this and provides motivation for doing so.


13. Applicant argues Wirt does not teach a consolidated area. Examiner notes that Hongo discloses a consolidated area.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Leonard J. McCreary, Jr.
Examiner
Art Unit 3616


PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

6/11/07